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AMENDMENTS TO THE ABSTRACT:

Please replace the paragraph (Abstract) beginning at page 16, line 1 with the

following rewritten version:

ABSTRACT OF THE DISCLOSURE

Regulating compression capability to a load is performed by an inverter (15) that

regulates revolution number of an electric motor (11). This makes unload control in

capability regulation unnecessary, preventing operational efficiency from lowering. Further,

a capacity control valve for capacity control is eliminated for a simplified valve control

mechanism. Regulating a variable inner volume ratio achieves the highest compressor

efficiency corresponding to operating condition (capability). When a low inner volume ratio

command is issued, a slide valve (19) is moved by a compression section controller (27) in

an axial direction toward the electric motor (11). This advances completion time of a

compression step to advance discharge of a compressed gas. When a high inner volume

ratio command is issued, the slide valve (19) is moved in an axial direction toward a piston

(25), which delays time of completion of compression step to delay discharge of a

compressed gas.

Page 4 of 6